

On June 15, 2022 the US Environmental Protection Agency issued new lifetime health advisories for four Per- and Polyfluoroalkyl Substances (PFAS). New interim health advisories have been issued for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS). Final health advisories have been issued for Hexafluoropropylene Oxide Dimer Acid and its Ammonium Salt (also known as “GenX Chemicals”) and Perfluorobutane Sulfonate (PFBS). These advisory levels are:

Chemical	Lifetime Health Advisory Level/Value (parts per trillion or ppt)
PFOA	0.004 (Interim)
PFOS	0.02 (Interim)
GenX Chemicals	10 (Final)
PFBS	2,000 (Final)

What is a Health Advisory?

A health advisory provides information on a contaminant that can cause negative human health effects and is known or anticipated to occur in drinking water. EPA’s health advisories are non-enforceable and non-regulatory. They provide technical information to drinking water system operators, as well as federal, state, Tribal, and local officials, on the health effects, analytical methods, and treatment technologies associated with drinking water contaminants. This health effects information includes the concentrations of such drinking water contaminants (the health advisory “levels” or “values”) at which adverse health effects are not anticipated to occur over specific exposure durations, such as one-day, 10-days or a lifetime.

EPA’s health advisory levels offer information that may be used to protect people from adverse health effects resulting from exposure throughout their lives to contaminants in drinking water.

What are PFAS?

Per- and poly-fluoroalkyl substances (PFAS) are a large and diverse group of chemicals used in many commercial applications due to their unique properties, such as resistance to high and low temperatures, resistance to degradation, and nonstick characteristics. Although PFAS have been manufactured and used broadly in commerce since the 1940s, concern over potential adverse effects on human health grew in the early 2000s with the detection of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) in human blood. Since that time, hundreds of different PFAS have been found in water, soil, and air. Many PFAS are made up of long chains of carbon-fluorine bonds, such as PFOA and PFOS, are environmentally persistent, bioaccumulative, and remain in human bodies for a long time.

Most uses of PFOA and PFOS were voluntarily phased out by U.S. manufacturers in the mid-2000s, although there are a limited number of ongoing uses, and these chemicals remain in the environment due to their persistence and lack of degradation. In addition, some newer PFAS in use break down into PFOA and PFOS.

What Levels are in the City of Talladega’s water? We sample our drinking water for PFAS on a quarterly basis as required by the Alabama Department of Environmental Management and the EPA. Our most current results for EPA’s four chemicals of concern show the following levels:

PFAS Compound	2016 EPA Health Advisory Level	City of Talladega Monitoring Averages	2022 EPA Health Advisory Level
PFOA	70 parts per trillion	6.57 parts per trillion	0.004 parts per trillion
PFOS	70 parts per trillion	30 parts per trillion	0.02 parts per trillion
PFBS	n/a	8.1 parts per trillion	2,000 parts per trillion
GenX	n/a	Non-detectable	10 parts per trillion

What are we at the City of Talladega Water & Sewer Department doing about PFAS?

Based on current methods, the health advisory levels for PFOA and PFOS are below the level of both detection (determining whether or not a substance is present) and quantitation (the ability to reliably determine how much of a substance is present). This means that it is possible for PFOA or PFOS to be present in drinking water at levels that exceed health advisories even if testing indicates no level of these chemicals.

But we recognize that the levels in our tests above are above the new EPA health advisory levels. And while there is no such thing as “zero” in science, we agree that lower levels mean lower risks. So we are following EPA’s recommendations that we inform customers, undertake additional sampling to assess the level, scope, and source of contamination, and examine steps to limit exposure. While water systems may not be able to eliminate all risks from PFOA and PFOS, they can successfully reduce those risks.

So to that end, we will be:

Increasing the frequency of our monitoring so that our engineers can more accurately determine the average levels of PFAS in our water and identify any seasonal patterns

Work to understand established and emerging treatment options and the costs associated with those options

Develop practical and economically feasible strategies to reduce levels of PFAS as EPA continues to work on developing future drinking water standards for PFAS compounds.

As always at the City of Talladega, protection of public health and the environment and the quality of your drinking water are our top priorities. If you have questions or concerns, please reach out. We are always available and proud to talk about how we produce and deliver your drinking water and the steps that our team takes to ensure its quality.